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# NOTICE OF ALLOWANCE AND FEE(S) DUE

38939

7590

10/22/2009

DYKEMA GOSSETT PLLC 10 S. WACKER DR., STE. 2300 CHICAGO, IL 60606 EXAMINER
THOMAS, DAVID C
ART UNIT PAPER NUMBER

1637 DATE MAILED: 10/22/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531.556	04/14/2005	Octavian Schatz	BOH6278P0150US	2322

TITLE OF INVENTION: METHOD FOR THE MANUFACTURE OF NUCLEIC ACID MOLECULES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	01/22/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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appropriate. All further indicated unless correcte maintenance fee notificat	correspondence including d below or directed other tions.	g the Patent, advance or erwise in Block 1, by (a	ders and notification of n a) specifying a new corres	naintenance fees w spondence address;	ill be and/or	mailed to the current (b) indicating a sepa	correspondence address as trate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				(s) Transmittal. This ers. Each additional	s certif paper	icate cannot be used f	r domestic mailings of the or any other accompanying nt or formal drawing, must
38939 DYKEMA GO 10 S. WACKER CHICAGO, IL 6	DR., STE. 2300	/2009		Cart	ificate	of Mailing or Trans	mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below.
							(Depositor's name)
			<u> </u>				(Signature)
	_						(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/531,556 ITTLE OF INVENTION	04/14/2005 : METHOD FOR THE N	MANUFACTURE OF NU	Octavian Schatz JCLEIC ACID MOLECUI	LES	ВС	0H6278P0150US	2322
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	01/22/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS	]			
THOMAS,	DAVID C	1637	435-060000	•			
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME AD PLEASE NOTE: Unla recordation as set forth (A) NAME OF ASSIG	ess an assignee is identi n in 37 CFR 3.11. Comp GNEE	Indication form ed. Use of a Customer  TO BE PRINTED ON The description of the form is NOT the form is NOT the description of this form is NOT the description of the form is NOT the form is NOT the description of the form is NOT the form i	(B) RESIDENCE: (CITY	vely, e firm (having as a agent) and the name rneys or agents. If a printed.  Dee) atent. If an assigned assignment.  Y and STATE OR C	members of upon name	er a 2	ocument has been filed for
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4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
a. Applicant claims	t <b>us</b> (from status indicated s SMALL ENTITY statu	s. See 37 CFR 1.27.	☐ b. Applicant is no long				
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeecords of the United Sta	ired) will not be accepted tes Patent and Trademark	d from anyone other than the Office.	he applicant; a regis	stered a	attorney or agent; or th	ne assignee or other party in
Authorized Signature				Date			
Typed or printed name							
This collection of information application. Confident submitting the completed this form and/or suggestions 1450. Alexandria	ation is required by 37 C iality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450 DC	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to the DNOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 m vidual case. Any coper, U.S. Patent and OTHIS ADDRESS	ne publ ninutes mment Fraden SENI	ic which is to file (and to complete, including s on the amount of times ark Office, U.S. Depo	by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents P.O. Box 1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/531,556	04/14/2005	Octavian Schatz	BOH6278P0150US 2322			
38939 75	590 10/22/2009		EXAMINER			
DYKEMA GOSSETT PLLC			THOMAS, DAVID C			
10 S. WACKER D			ART UNIT	PAPER NUMBER		
CHICAGO, IL 600	506		1637			
			DATE MAILED: 10/22/2009			

# **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 4 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 4 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/531,556	SCHATZ ET AL.	
Notice of Allowability	Examiner	Art Unit	
	DAVID C. THOMAS	1637	
	DAVID C. THOMAS	1637	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commu <b>IGHTS.</b> This application is so	this application. If not included nication will be mailed in due course. <b>THI</b>	
1. 🔀 This communication is responsive to the response filed 31	<i>July</i> 2009.		
2. $\square$ The allowed claim(s) is/are $\underline{23,25-29}$ and $\underline{31-40}$ .			
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>		r (f).	
2.   Certified copies of the priority documents have	e been received in Application	n No	
3. Copies of the certified copies of the priority do	cuments have been received	in this national stage application from the	е
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements	
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Review	( PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	,		
<ul><li>(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date</li></ul>	s Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Inf	ormal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)		mmary (PTO-413),	
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No./ľ 7. ⊠ Examiner's /	Mail Date Amendment/Comment	
Paper No./Mail Date 4.	8. ⊠ Examiner's S	Statement of Reasons for Allowance	
of Biological Material	9. 🔲 Other		
/Kenneth R Horlick/			
Primary Examiner, Art Unit 1637			

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Art Unit: 1637

## **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in telephone interviews with Lisa Mueller on October 9 and 12, 2009.

2. The application has been amended as follows:

In the Claims:

Claim 30 is canceled.

Claims 27, 35 and 36 are amended to read as follows:

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Claim 27 shall read:

The method according to claim 26, wherein the overhang is selected from the group consisting of a one-nucleotide overhang, a two-nucleotide overhang, a three-nucleotide overhang, a four-nucleotide overhang, a five-nucleotide overhang, a six-nucleotide overhang and a seven-nucleotide overhang.

In claim 35, line 3 shall read:

generating a four-nucleotide overhang at the 3' or 5' end.

In claim 36, line 3 shall read:

selected from the group consisting of one, two, three, four, five and six nucleotides.

### **REASONS FOR ALLOWANCE**

3. The following is an examiner's statement of reasons for allowance: in view of the amendments, the claimed invention is novel and unobvious over the cited prior art of Schatz. In particular, no prior art was found that teaches or suggests a method for the manufacture of a nucleic acid molecule comprising providing first and second at least partially double-stranded oligonucleotides, the first of which has a modification allowing the oligonucleotide to be coupled to a surface, with each oligonucleotide comprising a

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single-stranded overhang and a recognition site for a type IIS restriction endonuclease that cuts outside its recognition sequence, ligating the oligonucleotides via their overhangs to produce a first ligation product, wherein the first and second oligonucleotides are not attached to a surface during the ligation, immobilizing the ligation product to a surface and cutting the product with a type IIS restriction endonuclease to release an elongated oligonucleotide with an overhang. The ligation of the oligonucleotides in solution prior to coupling of either oligonucleotide to a surface distinguishes the method from the prior art. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Correspondence

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Thomas whose telephone number is 571-272-3320 and whose fax number is 571-273-3320. The examiner can normally be reached on 5 days, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/David C Thomas/ Examiner, Art Unit 1637 /Kenneth R Horlick/ Primary Examiner, Art Unit 1637